

ABSTRACT OF THE DISCLOSURE

A Real-time Emitter Locating System and Method is disclosed. The system provides a technique for taking in data sets (lines of bearing) from DF receivers and characterizing those signals with their respective probabilities of error. Then using a unique method, the preferred system applies a recursive processing technique to this continuous stream of data, displaying transmitter positions with significantly less uncertainty. Furthermore, the preferred system is able to perform these functions in real-time. The system is further capable of being fully automated to would reduce the processing time and reduce the necessity of human intervention. Still further, in an alternative embodiment of the present invention the system can be remotely controlled over a communications network and collect whereby locating data from several DF sets can be combined. In this way, a far more efficient EL System can be achieved in which the emitter's position can be determined more quickly from a centralized command facility. This combination of data filtering and data collection techniques significantly reduces measurement uncertainties and enhances the accuracy of EL systems.